

## SEQUENCE LISTING

<110> MERCK-SANTE  
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)

<120> Insulin-induced gene as therapeutic target in diabetes

<130> BFF 03P0004

<160> 8

<170> PatentIn version 3.1

<210> 1

<211> 1062

<212> DNA

<213> Rattus sp.

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<211> 353

<212> PRT

<213> Rattus sp.

<400> 2

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 20 25 30

Gly Leu Phe Asp Ser Phe Ser Leu Ile Arg Val Asp Cys Ser Ser Leu  
 35 40 45

Gly Pro His Ile Val Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu  
 50 55 60

Asp Leu Ser Ser Asn Arg Leu Glu Thr Val Asn Glu Ser Val Leu Gly  
 65 70 75 80

Gly Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu  
 85 90 95

Leu Thr Ser Ile Thr Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu  
 100 105 110

Ser Leu Asp Leu Ser His Asn Gly Leu Ala Ala Leu Pro Ala Glu Val  
 115 120 125

Phe Thr Ser Ser Pro Leu Ser Asp Ile Asn Leu Ser His Asn Arg Leu  
 130 135 140

Arg Glu Val Ser Ile Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala  
 145 150 155 160

Leu His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Leu Pro Tyr  
           165          170          175  
 Pro Ala Arg Ala Ser Leu Ser Ala Pro Thr Ile Gln Ser Leu Asn Leu  
           180          185          190

Ser Trp Asn Arg Leu Arg Ala Val Pro Asp Leu Arg Asp Leu Pro Leu  
           195          200          205

Arg Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Thr Ile Asn Pro Gly  
           210          215          220

Ala Phe Met Gly Leu Ala Gly Leu Thr His Leu Ser Leu Ala Ser Leu  
           225          230          235          240

Gln Gly Ile Leu Gln Leu Pro Pro His Gly Phe Arg Glu Leu Pro Gly  
           245          250          255

Leu Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Lys Trp Ala Gly  
           260          265          270

Ala Glu Val Phe Ser Gly Leu Gly Leu Leu Gln Glu Leu Asp Leu Ser  
           275          280          285

Gly Ser Ser Leu Val Pro Leu Pro Glu Thr Leu Leu His His Leu Pro  
           290          295          300

Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Gln Cys Arg Arg Leu  
           305          310          315          320

Val Arg Glu Gly Ala Val His Arg Gln Pro Gly Ser Ser Pro Lys Val  
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Val Leu His Cys Gly Asp Thr Gln Glu Ser Ala Arg Gly Pro Asp Ile  
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Leu

<210> 3

<211> 2557

<212> DNA

<213> Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (14)..(1075)

&lt;223&gt;

&lt;400&gt; 3

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        1          5          10

ggg gcc cag aca acc ccg cca tgc ttc ccc ggg tgc caa tgc gag gtg      97
Gly Ala Gln Thr Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val
  15          20          25

gag acc ttc ggc ctt ttc gac agc ttc agc ctg act ccg gtg gat tgt     145
Glu Thr Phe Gly Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys
  30          35          40

agc ggc ctg ggc ccc cac atc atg ccg gtg ccc atc cct ctg gac aca     193
Ser Gly Leu Gly Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr
  45          50          55          60

gcc cac ttg gac ctg tcc tcc aac ccg ctg gag atg gtg aat gag tcg     241
Ala His Leu Asp Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser
   65          70          75

gtg ttg gcg ggg ccg ggc tac acg acg ttg gct ggc ctg gat ctc agc     289
Val Leu Ala Gly Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser
   80          85          90

cac aac ctg ctc acc agc atc tca ccc act gcc ttc tcc cgc ctt cgc     337
His Asn Leu Leu Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg
   95          100          105

tac ctg gag tcg ctt gac ctc agc cac aat ggc ctg rca gcc ctg cca     385
Tyr Leu Glu Ser Leu Asp Leu Ser His Asn Gly Leu Xaa Ala Leu Pro
  110          115          120

gcc gag agc ttc acc agc tca ccc ctg agc gac gtg aac ctt agc cac     433
Ala Glu Ser Phe Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His
  125          130          135          140

aac cag ctc ccg gag gtc tca gtg tct gcc ttc acg acg cac agt cag     481
Asn Gln Leu Arg Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln
  145          150          155

ggc ccg gca cta cac gtg gac ctc tcc cac aac ctc att cac cgc ctc     529
Gly Arg Ala Leu His Val Asp Leu Ser His Asn Leu Ile His Arg Leu
  160          165          170

gtg ccc cac ccc acg agg gcc ggc ctg cct gcg ccc acc att cag agc     577
Val Pro His Pro Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser
  175          180          185

ctg aac ctg gcc tgg aac ccg ctc cat gcc gtg ccc aac ctc cga gac     625
Leu Asn Leu Ala Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp

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205	210	215	220
ggt ccg ggt gcc ttc gcg ggg ctg gga ggc ctt aca cac ctg tct ctg			721
Gly Pro Gly Ala Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu			
	225	230	235
gcc agc ctg cag agg ctc cct gag ctg gcg ccc agt ggc ttc cgt gag			769
Ala Ser Leu Gln Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu			
	240	245	250
cta ccg ggc ctg cag gtc ctg gac ctg tcg ggc aac ccc aag ctt aac			817
Leu Pro Gly Leu Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn			
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tgg gca gga gct gag gtg ttt tca ggc ctg agc tcc ctg cag gag ctg			865
Trp Ala Gly Ala Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu			
	270	275	280
gac ctt tcg ggc acc aac ctg gtg ccc ctg cct gag gcg ctg ctc ctc			913
Asp Leu Ser Gly Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu			
285	290	295	300
cac ctc ccg gca ctg cag agc gtc agc gtg ggc cag gat gtg cgg tgc			961
His Leu Pro Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys			
	305	310	315
cgg cgc ctg gtg cgg gag ggc acc tac ccc cgg agg cct ggc tcc agc			1009
Arg Arg Leu Val Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser			
	320	325	330
ccc aag gtg gcc ctg cac tgc gta gac acc cgg gaa tct gct gcc agg			1057
Pro Lys Val Ala Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg			
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Gly Pro Thr Ile Leu			
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2557

&lt;210&gt; 4

&lt;211&gt; 353

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (121)..(121)

&lt;223&gt; 'Xaa' in position 121 represents Ala or Thr.

&lt;400&gt; 4

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Met Pro Trp Pro Leu Leu Leu Leu Leu Ala Val Ser Gly Ala Gln Thr
1      5      10      15

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Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val Glu Thr Phe Gly
      20      25      30

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Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys Ser Gly Leu Gly  
 35 40 45

Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu Asp  
 50 55 60

Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser Val Leu Ala Gly  
 65 70 75 80

Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu  
 85 90 95

Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser  
 100 105 110

Leu Asp Leu Ser His Asn Gly Leu Xaa Ala Leu Pro Ala Glu Ser Phe  
 115 120 125

Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg  
 130 135 140

Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala Leu  
 145 150 155 160

His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Val Pro His Pro  
 165 170 175

Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala  
 180 185 190

Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg  
 195 200 205

Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile Gly Pro Gly Ala  
 210 215 220

Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu Ala Ser Leu Gln  
 225 230 235 240

Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu Leu Pro Gly Leu  
 245 250 255

Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn Trp Ala Gly Ala  
 260 265 270

Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu Asp Leu Ser Gly

275	280	285																	
Thr	Asn	Leu	Val	Pro	Leu	Pro	Glu	Ala	Leu	Leu	Leu	His	Leu	Pro	Ala				
290		295			300														
Leu	Gln	Ser	Val	Ser	Val	Gly	Gln	Asp	Val	Arg	Cys	Arg	Arg	Leu	Val				
305		310			315			320											
Arg	Glu	Gly	Thr	Tyr	Pro	Arg	Arg	Pro	Gly	Ser	Ser	Pro	Lys	Val	Ala				
	325			330		335													
Leu	His	Cys	Val	Asp	Thr	Arg	Glu	Ser	Ala	Ala	Arg	Gly	Pro	Thr	Ile				
	340			345		350													

Leu

<210> 5

<211> 25

<212> DNA

<213> Artificial : primer

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25

<210> 6

<211> 31

<212> DNA

<213> Artificial : primer

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31

<210> 7

<211> 22

<212> DNA

<213> Artificial : primer

<400> 7

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22



<210> 8

<211> 29

<212> DNA

<213> Artificial : primer

<400> 8

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29

1